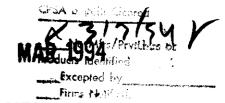
LOG OF MEETING



DIRECTORATE FOR ENGINEERING SCIENCES COMPANY OF THE PROPERTY AND THE PROPERTY OF THE PROPERTY

SUBJECT: HUD Regulation for Manufactured Homes; Requirement that Heat-Tape not

include a GFCI.

DATE OF MEETING: 2/7/94 PLACE: Room 605, East-West Towers

LOG ENTRY SOURCE: Dennis McCoskrie, ESEE

DATE OF ENTRY: 2/14/94

COMMISSION ATTENDEES:

Elizabeth Haught, FO
Kimberly Long, EPHA
Dennis McCoskrie, ESEE
Carolyn Meiers, Acting Heat Tape Project Manager, EPHF
Nicholas Mogan, ESEE
Stacey Reuben-Mesa, EXPA
Richard Schenck, ESEL
Charlie Smith, ECPA

NON-COMMISSION ATTENDEES:

Vic Ferrante, Mechanical Engineer, Codes and Standards, HUD John Stevens, Electrical Engineer, Codes and Standards, HUD

SUMMARY OF MEETING:

Mr. McCoskrie opened the meeting by briefly outlining the history of the Commission's Heat Tape project. He discussed the staff's concern about heat tape fires before the petition, the project instigated by petition, and the series of studies and analyses that led to recommending the use of GFCI protection with heat tapes. Mr. McCoskrie explained that CPSC Staff was aware that the HUD regulation for the construction of manufactured homes stipulated that the heat-tape outlet not incorporate a GFCI. He stated that staff believes that the potential fire hazard associated with heat tapes outweighs the potential for frozen water pipes that might result from GFCI "false trips". Mr. Mc.Coskrie emphasized that the CPSC staff was not recommending that a outlet-type GFCI be installed in the heat-tape outlet under the manufactured home. He added that they did recommend providing ground fault protection to that outlet, with a signal to the occupants if the protective device has tripped and a means of resetting the device from the living areas. He indicated that CPSC staff had considered some ways to accomplish these ends and would be willing to discuss them later, if HUD staff wished to do this.

Mr. Stevens acknowledged the seriousness of the fire hazard, but indicated that HUD would require corroborating data before they could justify changing the present manufactured-home regulation. Mr. Ferrante expressed strong concern about the displeasure of manufactured-home residents who might experience frozen water pipes because of an undetected GFCI "trip".

Mr. Stevens stated that the most reliable vehicle effecting a change in HUD's manufactured-home regulation would be a strong recommendation from the CPSC Chairman to the Secretary of HUD.

Ms. Meiers briefly reviewed the human-factors study of heat tape instructions and the conclusion that instructions could not be relied upon to ensure proper installation. Mr. McCoskrie sketched the two year campaign to identify and analyze heat-tape fire incidents. Reports of the Human Factors and the Hazard Analysis reports were presented to the HUD representatives. Mr. Mogan then outlined the engineering work performed in the CPSC engineering laboratory and the rationale for the remedial means test contract recently completed by UL. A copy of the UL report also was transferred, with the proviso that it not be released to the public until cleared by CPSC procedures.

A discussion of the GFCI "false tripping" concern took place. Mr. McCoskrie stated that a UL engineer who was familiar with the work that had been done in the past few years to reduce the sensitivity of GFCI's to extraneous signals had agreed to supply documentation on this work soon. He also mentioned that UL and the manufacturers involved had offered to meet with CPSC staff and HUD to discuss the subject. Mr, McCoskrie agreed to forward the GFCI information as soon as it is received from UL. Mr. Schenck mentioned that during observations of heat-tape installations in the field, it was not unusual to find heat tapes plugged into the home's outdoor outlets that are supposed to have GFCI protection. Mr. Mogan added that the heat tape testing with GFCIs performed by UL did not exhibit a single "false trip", even though the laboratory was subject to a great deal of electrical noise.

Mr. Stevens stated that HUD was giving serious consideration to a revision of the manufactured home regulation that would be neutral to GFCI protection of the heat-tape outlet, i. e., would neither require nor forbid it.